

IN THE SPECIFICATION

Please amend the paragraph spanning lines 13-17 on page 1 of the specification as follows:

-- Flowing electrolyte batteries (Zn-Br batteries, V-Redox batteries, etc) are well known in the art for their quality power providing characteristics and their cycling ability. Generally, such batteries rely on the circulation, by pumps, of electrolyte. As the circulation of electrolyte includes a multitude of components, fittings and conduits, a potential always exists for failure of one of these components. Such failure will generally result in a leak of electrolyte. --

Please amend the paragraph spanning lines 18-22 on page 1 of the specification as follows:

-- In addition, since many such batteries require cooling systems which likewise comprise a multitude of conduits, fittings and components, the cooling systems are likewise problematic. Failure in such components generally results in a leak of coolant. Further still, many such batteries, especially in industrial applications, are placed in a substantially sealed container which ~~is~~ remains exposed to ~~a~~ harsh environments. As such, damage to the sealed container often results in the collection of precipitation within the container. --

Please amend the paragraph spanning lines 4-8 on page 4 of the specification as follows:

-- In one embodiment, the step of providing at least one containment member comprises the steps of (a) providing a stack leak containment member; (b) positioning the stack leak containment member such that a leak from the stack is collected by the stack leak containment member; (c) providing a reservoir leak containment member; and (d) positioning the reservoir leak containment member such that a leak from the reservoir ~~containment member~~ is collected by the reservoir leak containment member. --

Please amend the paragraph found on page 4, lines 9-15 of the specification as follows:

-- In one embodiment, the step of providing a sensor comprises the steps of (a) providing a sensor for the stack leak containment member; and (b) providing a sensor for the reservoir leak containment member. In such a preferred embodiment, the step of positioning the at least one sensor comprises the steps of (a) positioning a sensor in the stack leak containment member such that a leak collected in the stack leak containment member triggers

the sensor; and (b) positioning a sensor in the reservoir leak containment member such that a leak collected in the reservoir leak containment member triggers the sensor. --

Please amend the paragraph found on page 6, lines 7-17 of the specification as follows:

-- Leak detection system 10 is shown in FIG. 1 as comprising stack leak containment member 12, ~~electrolyte reservoir~~ leak containment member 14 and means 16 for sensing a leak. Leak detection system 10 is for use in association with a flowing electrolyte battery, such as zinc/bromine battery 100. While various flowing electrolyte batteries are contemplated for use, the invention will be described with reference to a zinc/bromine battery solely as an example. Generally, zinc/bromine battery 100 includes one or more stacks, such as stack 102, electrolyte reservoir 104, circulating means 106 and means 108 for controlling the climate within battery 100. Stack 102 includes plurality of arranged anodes and cathodes so as to comprise a plurality of stacked cells. Electrolyte reservoir 104 stores the electrolyte which is circulated by circulation means 106 through stack 102. In certain embodiments, a climate control means 108 may be incorporated to either heat or cool the electrolyte so as to maintain the overall battery within operating parameters. --

Please amend the paragraph beginning on page 6, line 18 and ending on page 7, line 3 of the specification as follows:

-- Electrolyte stack leak containment member 12 is shown in FIG. 1 as comprising base 30 and sides 32 which define cavity 34. As will be understood, at least a portion of stack 102 is positioned within cavity 34 such that, in the case of an electrolyte leak in stack 102, such a leak will fill cavity 34. In embodiments such as the embodiment shown in FIG. 1, wherein two vertically oriented stacks 102, 102' form a tower, each stack has its own electrolyte leak containment member, 12, 12'. In such an embodiment, the upper electrolyte leak containment member 12 includes overflow opening 36, which, in turn, directs any overflow of electrolyte into the lower electrolyte leak containment member 12'. In this manner, the spread of electrolyte can be minimized. --

Please amend the paragraph spanning lines 4-10 on page 7 as follows:

-- Reservoir leak containment member 14 is shown in FIG. 1 as comprising base 40 and sides 42 which define cavity 44. The electrolyte reservoirs are positioned within the reservoir leak containment member such that any leak in the electrolyte reservoirs will be contained by the reservoir leak containment member. In addition, the reservoirs, and, in turn, the reservoir leak containment members are positioned below stack 102 such that, in the

event of a leak which overflows electrolyte leak stack containment member 12 (or 12') will be directed into, and contained by, reservoir leak containment member 14. --

Please amend the paragraph spanning lines 5-21 on page 7 as follows:

-- Sensing means ~~4816~~ is shown in FIG. 1 as comprising sensor 50, controller 52 and connector 54. Sensor 50, as shown in FIG. 2, includes base resistor 60 and switch 62. Switch 62 is in parallel with resistor 60 and includes surface 70 and surface 72. As will be explained in detail below, in the event of a leak, the leaking fluid contacts surface 70 and surface 72, to, in turn, close the circuit, essentially forming a switch. While other shapes are contemplated, the surfaces 70, 72 comprise mesh surfaces. Such mesh surfaces provide a relatively large surface area for contact of the fluid with the mesh surfaces. While various systems are contemplated, resistor 60 comprises a resistor having a value of 3000 .OMEGA., and the voltage applied to switch 62 and resistor 60 is 24V. Of course, various other circuits are contemplated, wherein the applied voltage may be either lower or higher, and, various resistors are contemplated for use. In other embodiments, the resistor may be omitted wherein the controller views the circuit as an open circuit until such time as the switch is closed. --

Please amend the paragraph found at lines 6-10 of page 9 as follows:

-- Similarly, a leak in the reservoir will tend to cause electrolyte to enter into the reservoir leak containment member. As the level of electrolyte increases in the reservoir leak containment member, electrolyte will contact surfaces 70 and 72 of the sensor positioned within the reservoir leak containment member and the switch will be effectively closed by the electrolyte. In turn, the circuit will exhibit an increased current which will be sensed by the controller. --

Please amend the paragraph found at lines 11-14 of page 9 as follows:

-- It will be understood that in certain embodiments which utilize a liquid coolant, a coolant leak can occur. Such a coolant leak will generally collect in the base of the unit or in the reservoir leak containment member. As with the electrolyte leak, as the coolant level rises, the coolant will contact the surfaces 70 and 72 of one of the sensors, thereby effectively closing the switch. --

Please amend the paragraph beginning at line 15 of page 9 and ending at line 1 of page 10 as follows:

-- Again, the controller will recognize the closing of the switch. Indeed, any fluid collection (i.e. electrolyte leak, coolant leak, condensation, outside precipitation) within any

of the containment members or proximate the base of the flowing electrolyte battery will trigger a sensor switch to close. Since each such fluid generally comprises a different resistivity (i.e. the electrolyte is generally exhibits less electrical resistance than coolant or water (contaminated)), current changes sensed by the controller will be different based on the fluid that is causing the closing of the respective switch. In turn, the controller can be programmed to distinguish between the different leaks. In this case, if the controller determines that the cause of the leak is condensation, there is no need to service the battery or to take the battery out of operation. --

Please amend the paragraph found at lines 2-9 of page 10 as follows:

— In another embodiment, as shown in FIG. 3, the sensor may comprise a plurality of switches in parallel with a single resistor. In such an embodiment, each switch may be positioned in a different area, such as the electrolyte stack leak containment member, the electrolyte reservoir leak containment member and the overflow area of the housing. As such, a leak in any one of these areas will cause fluid in the respective area to close the switch, and in turn, lower the overall resistance of the circuit. The lower resistance (and increased current) is then sensed by the controller which is attached to the sensor. In such an embodiment, the controller can signal a leak, however, the precise location of the leak is not known. --